

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
1 + 6	G	G	G	R	R	R	R	R	DW	DW	DW	DW
CHANGE	G	G	G	R	R	R	R	R	DW	DW	DW	DW
2 + 6	G	G	G	G	G	R	R	R	WK	WK	DW	DW
EAR	G	G	G	G	G	R	R	R	FL/DW	FL/DW	DW	DW
CHANGE	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
4	R	R	R	R	R	G	G	G	DW	DW	DW	DW
GE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
4 ALT	R	R	R	R	R	G	G	G	DW	DW	WK	WK
EAR	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW
CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
ING	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK
TION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

PROJECT DESCRIPTION

PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT MD 450 AND I-95 SOUTHBOUND RAMPS IN PRINCE GEORGE'S COUNTY. MD 450 IS TO RUN IN A EAST-WEST DIRECTION.

SECTION OPERATION

ALLY, THE INTERSECTION OPERATES IN A NEMA FOUR (4) PHASE FULL-TRAFFIC-ACTUATED MODE. THIS IS A EXCLUSIVE/PERMISSIVE LEFT TURN FOR EASTBOUND MD 450. THE MD 450 THROUGH MOVEMENTS ARE CONCURRENTLY. THE I-95 SOUTHBOUND RAMP OPERATES ALONE. THERE IS AN EXISTING ACTUATED PEDESTRIAN CROSSING ON THE NORTH LEG OF THE INTERSECTION. A NEW PUSH BUTTON ACTUATED PEDESTRIAN CROSSING WILL BE PROVIDED FOR THE WEST LEG OF THE INTERSECTION.

INTERSECTION IS TO BE MODIFIED TO A NEMA FOUR (4) PHASE FULL-TRAFFIC-ACTUATED MODE. SIGNAL HEADS WILL BE PROVIDED FOR ALL APPROACHES. THERE WILL BE PEDESTRIAN CROSSINGS PROVIDED ON THE WEST LEG OF THE INTERSECTION.

EXISTING CONTROLLER AND LOOP DETECTOR AMPLIFIERS WILL BE UTILIZED.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

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DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358

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DISTRICT ENGINEER
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EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
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RALEIGH MEDLEY
DISTRICT ENGINEER - MAINTENANCE
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CHIEF, TRAFFIC OPERATIONS DIVISION
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MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
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MR DAVE SCHWARTZ
SUPPLY OFFICER IV
(SIGNAL SHOP WAREHOUSE)
(410) 787-7668

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

SPEC. SECTION.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
* ---	900000	1 EACH	VIDEO INTERFACE EQUIPMENT
813	973023	69.5 S.F.	SHEET ALUMINUM SIGNS - 2 EACH M6-2L (21"x15") "SIGN" "DIRECTIONAL ARROW - DIAGONAL" - 2 EACH M6-2R (21"x15") "SIGN" "DIRECTIONAL ARROW - DIAGONAL" - 4 EACH W11-2 (30"x30") "SIGN" "PEDESTRIAN CROSSING (SYMBOL)" 1 EACH ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND - (30"x 51") POLE MOUNTED: M3-2 SIGN (24"x12") "EAST" (FOR INDEPENDENT USE) M1-5 SIGN (30"x24") "MARYLAND 450" (FOR INDEPENDENT USE) M6-1 SIGN (21"x15") "DIRECTION ARROW-HORIZONTAL" 1 EACH ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND - (48"x 75") POLE MOUNTED: M3-2 SIGN (30"x15") "EAST" (FOR INDEPENDENT USE) M1-5 SIGN (48"x36") "MARYLAND 450" (FOR INDEPENDENT USE) M6-1 SIGN (30"x24") "DIRECTION ARROW-HORIZONTAL"

* TO BE INSTALLED BY SHA SIGNAL SHOP

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR:

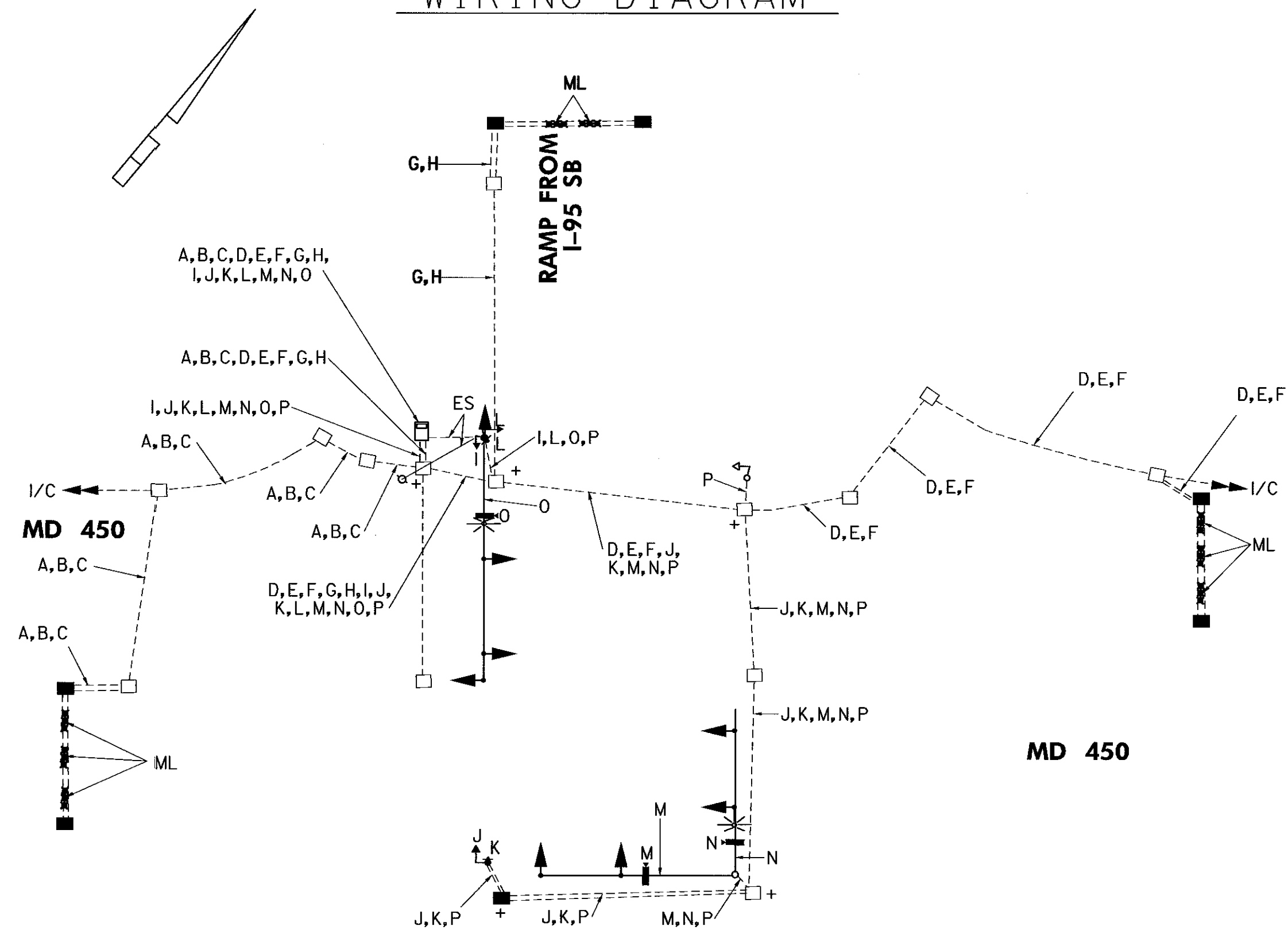
SPEC. SECTION.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	1 C.Y.	TEST PIT EXCAVATION
556	585405	40 L.F.	FURNISH AND INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
556	585622	450 L.F.	FURNISH AND INSTALL 12" WHITE HEAT APLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)
556	585624	140 C.Y.	FURNISH AND INSTALL 24" WHITE HEAT APLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOPLINE)
801	801004	1 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	5 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
805	870160	250 L.F.	FURNISH AND INSTALL 2 IN SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
810	800000	2 EACH	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET 500' LEAD-IN
810	800000	6 EACH	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET 1000' LEAD-IN
810	802501	400 L.F.	FURNISH AND INSTALL NO. 6 STRANDED BARE COPPER GROUND WIRE
810	861105	900 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 2-CONDUCTOR (NO. 14 AWG)
810	861106	900 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 3-CONDUCTOR (NO. 14 AWG)
811	802145	2 EACH	ADJUST EXISTING HANDHOLE
811	811011	7 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
812	801106	68 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4"x 6"
813	813014	33.8 S.F.	INSTALL GROUND MOUNTED SIGN
813	813015	35.7 S.F.	INSTALL OVERHEAD MOUNTED SIGN
814	800000	8 EACH	FURNISH AND INSTALL 12 INCH BLACK FACE PEDESTRIAN SIGNAL HEAD SECTION
814	800000	25 EACH	FURNISH AND INSTALL 12 INCH BLACK FACED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
814	800000	3 EACH	FURNISH AND INSTALL 8 INCH BLACK FACED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
817	800000	2 EACH	INSTALL PEDESTRIAN PUSHBUTTON AND SIGN (SIGN: PUSHBUTTON TO CROSS ANNAPOLIS ROAD)
818	818004	1 EACH	FURNISH AND INSTALL 10 FT BREAKAWAY PEDESTAL POLE
---	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
---	816011	3 EACH	FURNISH AND INSTALL VIDEO DETECTION CAMERA
---	816005	1 EACH	FURNISH AND INSTALL 250 FT. CABLE PRE-MANUFACTURED CAMERA TO CABINET
---	816010	2 EACH	FURNISH AND INSTALL 500 FT. CABLE PRE-MANUFACTURED CAMERA TO CABINET

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELLY DRIVE, HANOVER, MARYLAND 21076.

NOTE: 1. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR

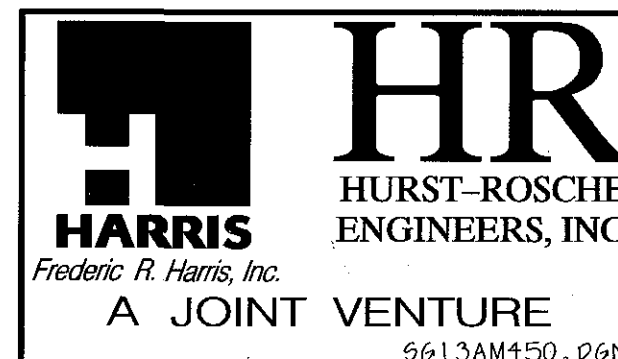
WIRING DIAGRAM



WIRING KEY

A,B,C,D,E,F }	- MICRO-LOOP PROBE SET WITH 1,000' LEAD IN	ML	- MICRO-LOOP PROBE SET
G,H }	- MICRO-LOOP PROBE SET WITH 500' LEAD IN	ES	- EXISTING OVERHEAD ELECTRICAL SERVICE
I,J }	- 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	+	- 3/4 IN. x 10 FT. GROUND ROD
P }	- STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)		
K,L }	- 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)		
O }	- 250' CABLE FOR PRE-MANUFACTURED CAMERA TO CONTROL CABINET		
M,N }	- 500' CABLE FOR PRE-MANUFACTURED CAMERA TO CONTROL CABINET		

SS-6



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 AND I-95 SOUTHBOUND RAMPS
NEW CARROLLTON, MARYLAND

DRAWN BY: D.R.	F.A.P. NO.: SEE TITLE SHEET	TS NO. 953D-GI	SHEET NO.
CHECKED BY: D.L.A.	S.H.A. NO.: 24326584		
SCALE: NOT TO SCALE	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO. EI07	
DATE: 2/2002	LOG MILE: 16045004.57		OF